WATER RECLAMATION AND REUSE ADDENDUM TO AN APPLICATION FOR A VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT OR A VIRGINIA POLLUTION ABATEMENT PERMIT

Ap	plicant information				
1.	Name of Facility:				
2.	. Facility Owner:				
3. Owner's Mailing Address					
	a. Street or P.O. Box				
	b. City or Town c. State d. Zip Code				
	e. Phone Number f. Fax Number				
	g. E-mail address				
4.	Facility Location:				
	Street No., Route No., or Other Identifier				
	County				
	Latitude: Longitude:				
5.	Is the operator of the facility also the owner? Yes No				
	If No, complete A.6. and A.7.				
6.	Name of Operator:				
7.	Operator's Mailing Address				
	a. Street or P.O. Box				
	b. City or Town c. State d. Zip Code				
	e. Phone Number f. Fax Number				
	g. E-mail address				
Pei	rmitting Information				
Th	is addendum is for a new (check all that apply):				
	Reclamation system. Satellite reclamation system. Reclaimed water distribution system. End user ¹ . Not applicable. Proceed to B.2.				
	Il the above new system or systems or end user be an expansion or modification ^{2.} to an existing permitted stem or end user ^{1.} ?				
	No. Proceed to item B.3. Yes. Proceed to item B.2.				
Rei	fers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite				

B. 1.

reclamation system, reclaimed water distribution system, or a combination thereof.

2. For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation).

^{2.} For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation system or reclaimed water distribution system) or end user^{1.} is any change to the facilities or reuses of that system or end user^{1.}, respectively, warranting the inclusion of new reclaimed water standards, monitoring requirements or conditions in the permit currently issued to the existing system or end user^{1.}

 Reclaimed water distrib End user¹. a. Provide the following i 	•	n for each existing system o	or end user ¹ :	
System or End User ^{1.} No		Type of current permit issued (VPDES or VPA)	Permit Number	Permit Expiration Date
_				_
modified ^{2.} . For reclamation systems, s	atellite rec		d water distribution	n systems and end use
For reclamation systems, s t are (i) new, (ii) existing but a. Is or will there be any common ownership or man. No. Proceed to B.3.d.	atellite reclait unpermitty combination	lamation systems, reclaime ted, or (iii) existing, permittion of the systems, end us	d water distribution ted and to be expand ers ¹ , or wastewate eparated from each	n systems and end used ded or modified ² : r treatment works ur other?
For reclamation systems, s t are (i) new, (ii) existing bu a. Is or will there be any common ownership or man \(\subseteq \text{No. Proceed to B.3.d.} \) Yes. Provide the follow	atellite reclait unpermitty combinate nagement, it wing informagement:	lamation systems, reclaime ted, or (iii) existing, permitt ion of the systems, end us ncluding those physically s	d water distribution ted and to be expanders ¹ , or wastewate eparated from each users ¹ or wastewate	n systems and end used ded or modified ² : r treatment works ur other?
For reclamation systems, stare (i) new, (ii) existing but a. Is or will there be any common ownership or man No. Proceed to B.3.d. Yes. Provide the following common ownership or man new Yes.	atellite reclait unpermitty combinate nagement, it wing informagement:	lamation systems, reclaime ted, or (iii) existing, permittion of the systems, end us neluding those physically smation for all systems, end	d water distribution ted and to be expanders ¹ , or wastewate eparated from each users ¹ or wastewate	n systems and end used ded or modified ^{2.} : r treatment works used the other? er treatment works used the other works are the other works and the other works are the other works and the other works are the other works and the other works are the other works are the other works and the other works are the othe
For reclamation systems, s t are (i) new, (ii) existing but a. Is or will there be any common ownership or man No. Proceed to B.3.d. Yes. Provide the following common ownership or man recommon ownership ownership or man recommon ownership ownership ownership ownership ownershi	atellite reclait unpermitty combinate nagement, it wing informagement:	lamation systems, reclaime ted, or (iii) existing, permittion of the systems, end us neluding those physically smation for all systems, end	d water distribution ted and to be expanders ¹ , or wastewate eparated from each users ¹ or wastewate	n systems and end used ded or modified ² : r treatment works ur other? er treatment works under treatment works under treatment works under treatment works under the treatment works which works were the treatment works which works were the treatment works which works were the
For reclamation systems, s t are (i) new, (ii) existing but a. Is or will there be any common ownership or man No. Proceed to B.3.d. Yes. Provide the following common ownership or man recommon ownership ownership or man recommon ownership ownership ownership ownership ownershi	atellite reclait unpermitty combinate nagement, it wing informagement:	lamation systems, reclaime ted, or (iii) existing, permittion of the systems, end us neluding those physically smation for all systems, end	d water distribution ted and to be expanders ¹ , or wastewate eparated from each users ¹ or wastewate	n systems and end used ded or modified ^{2.} : r treatment works used the other? er treatment works used the other works are the other works and the other works are the other works and the other works are the other works and the other works are the other works are the other works and the other works are the othe

^{1.} Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

^{2.} For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation system or reclaimed water distribution system) or end user^{1.} is any change to the facilities or reuses of that system or end user^{1.}, respectively, warranting the inclusion of new reclaimed water standards, monitoring requirements or conditions in the permit currently issued to the existing system or end user^{1.}

b. Identify by name any combination of the systems (i.e., reclamation, satellite reclamation, reclaimed water distribution), end users ¹ or wastewater treatment works with common ownership or management listed in B.3.a. to be covered by one permit. (See addendum instructions)				
c. Identify by name any of the systems, end users ¹ or wastewater treatment works with common ownership or management listed in B.3.a. to be covered by separate permits.				
distribution system provide reclaimed wat with that wastewater treatment works, rec distribution system? No.	·			
☐ Yes. Provide the following information Name of Wastewater Treatment Works or System (Reclamation, Satellite Reclamation, Reclaimed Water Distribution) Location of Irrigation Property*				
* Refers to irrigation property that receives or will receive reclaimed water from and is under common ownership of management with the named wastewater treatment works or system in the first column. (See addendum instructions)				
e. Will a reclaimed water distribution system that receives reclaimed water from a reclamation system of satellite reclamation system under separate ownership from the reclaimed water distribution system distribute reclaimed water to end users other than the owner or management of the reclaimed water distribution system?				
☐ Yes.☐ No.	☐ Yes.			
If no, will there be a service agreement established between the permittee of the reclamation system and the ownership or management of the reclaimed water distribution system?				
☐ Yes.☐ No.				
listributions from which the end user ^{1.} will r	ion systems, satellite reclamation systems and reclaimed water receive reclaimed water; and for each listed system, indicate the 2 or both) that it will provide to the end user ^{1.} and if the end user ^{1.} system.			

^{1.} Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

Name of System (Reclamation, Satellite Reclamation, Reclaimed Water Distribution)	Provided	claimed Water to End User ^{1.} evel 2 or both)	Service Agreement or Contract with End User ^{1.} (Yes/No)
 a. Will the end user¹ be under common over satellite reclamation systems or reclaimed was 	wnership or man ater distribution s	agement with any o ystems listed above	of the reclamation systems, ?
☐ No.☐ Yes.			
If yes, will the end user ¹ be covered by the pe	ermit of the syste	em?	
☐ No.☐ Yes. Indicate the name of the system:			
b. For all systems listed in B.4 with which user ¹ received notice of failure to comply with		<u> </u>	·
No. ☐ Yes. If yes, indicate below the name(s) of the system(s) that issued notice(s) of failure to comply, to date of all notices and a brief description of cause for each notice. Additional information may be attach as necessary. If more than one system has issued a notice of failure to comply to the end user¹, comple D.1.a, D.1.b and D.1.c; D.2 if the reuse of the end user¹ includes irrigation, and E of the addendum. (S addendum instructions)			formation may be attached to the end user ¹ , complete
Name of System that Issued Notice	Date of Notice	Description	of Cause for Notice
c. Will the end user ^{1.} blend the reclaimed v B.4?	water that it rece	ives from two or mo	ore of the systems listed in
☐ No.☐ Yes.			
If yes, will the end user ^{1.} blend Level 1 and L	Level 2 reclaimed	water?	
☐ No. ☐ Yes.			

^{1.} Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

d. Will the end user ^{1.} distribute common ownership or manageme			r to other end users not under	
 □ No. □ Yes. If yes, complete applicable sections in C and D of this addendum. (See addendum instructions) 				
General Project Information (See addendum instructions)				
For reclamation systems, satellite recollowing information. For project information for only items C.1., C.2.	ts that involve ex			
1. A description of the design a	nd a site plan of ea	ach system. (See addendur	n instructions)	
2. A general location map. (See	e addendum instru	ctions)		
3. Information regarding each water to the reclamation system t		nent works that diverts or	will divert effluent or source	
a. Name of Wastewater Treatn	nent Works	VPDES or VPA Permit No. of Facility	General VPDES Watershed Permit No.*	
and Total Phosphorus Discharg 820), and applies only to faciliti	es and Nutrient Tra es with existing ind treatment proces	ding in the Chesapeake Bay ividual VPDES permits.	mit Regulation for Total Nitrogen Watershed in Virginia (9VAC25-vater treatment works prior to	
			or more significant industrial e following information. (See	
Name of Wastewater Treatment Works		Us Indirectly Discharging to water Treatment Works	Approved Pretreatment Program (Yes/No/NA)*	
* A pretreatment program applies and may or may not be approve			wned treatment works) with SIUs "NA" means "not applicable".	

^{1.} Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

Information regarding the sewage clamation system to be permitted.	collections system that diverts or v	vill divert sewage to the satell		
a. The name of the sewage collect	he name of the sewage collection system and the owner of that system.			
b. For the treatment works at the end of the sewage collection system that receives or will remaining sewage, provide:				
Name of the treatment works:				
VPDES or VPA permit no.:				
	ion for each SIU that discharges divage or municipal wastewater is or downstream SIUs whose discharge	will be diverted to the satell		
the satellite reclamation system inta		r		
		Distance Between SIU and Satellite Reclamation System		
the satellite reclamation system inta	Location (Latitude & Longitude)	Distance Between SIU and		
the satellite reclamation system inta	Location (Latitude & Longitude)	Distance Between SIU and		
the satellite reclamation system inta	Location (Latitude & Longitude)	Distance Between SIU and		
Name of SIU	Location (Latitude & Longitude)	Distance Between SIU and		
* Distance along the length of the sed. Provide concentrations of the diverted from the sewage collection Analyses for other parameters may	twage collection system line or lines. following parameters for sewage a system to the satellite reclamation by be provided, if available. Analym believed to be discharged by the statelline and the satellite reclamation believed to be discharged by the statelline and the satelline and the satelline reclamation believed to be discharged by the statelline and the satelline reclamation believed to be discharged by the satelline reclamation and the satell	Distance Between SIU and Satellite Reclamation System or municipal wastewater to system at the point of diversity cases of the sewage or municipal wastewater to the sewage of the sewa		
* Distance along the length of the sed. Provide concentrations of the diverted from the sewage collection Analyses for other parameters may wastewater for pollutants of concert	Location (Latitude & Longitude) of SIU wage collection system line or lines. following parameters for sewage a system to the satellite reclamation be provided, if available. Analym believed to be discharged by the setions)	Distance Between SIU and Satellite Reclamation System or municipal wastewater to system at the point of diversions of the sewage or municipal wastewater to the sewage of the sewage or municipal wastewater to the sewage or municipal wastewater to the sewage of the sewage or municipal wastewater to		
* Distance along the length of the sed. Provide concentrations of the diverted from the sewage collection Analyses for other parameters may wastewater for pollutants of concerbe required. (See addendum instructions)	Location (Latitude & Longitude) of SIU wage collection system line or lines. following parameters for sewage a system to the satellite reclamation by be provided, if available. Analym believed to be discharged by the strions)	Distance Between SIU and Satellite Reclamation System or municipal wastewater to system at the point of diversions of the sewage or municipal wastewater to the sewage of the sewage or municipal wastewater to the sewage or municipal wastewater to the sewage of the sewage or municipal wastewater to		

5.	Information regarding the reclamation system or satellite reclamation system to be permitted.			
	a. Indicate if the system will reclaim industrial wastewater as follows: (See addendum instructions)			
	At an industrial facility for reuse exclusively on the property of the industrial facility. Complete C.5.b.			
 □ At an industrial facility for reuse on and off, or exclusively off the property of the industrial composes less than or equal to 90 % of the mixture □ As part of a mixture with sewage or municipal wastewater where the industrial composes greater than 90 % of the mixture 				
	b. For reuse of reclaimed industrial wastewater on exclusively the property of the industrial facility where the reclaimed water is produced, check all that apply:			
 The reclaimed industrial wastewater for reuse does not contain or is not expected to cont pathogens or other constituents in sufficient quantities and with a potential for human comay be harmful to human health. Reuse of the reclaimed industrial wastewater involves a closed or isolated system that provided worker contact with reclaimed water of the system. Other measures are in place including but not limited to, applicable federal and state occurs afety and health standards and requirements to adequately inform and protect employees pathogens or other constituents that may be harmful to human health in the reclaimed individual water to be reused at the industrial facility. 				
	If none of the above apply, complete the remainder of the addendum. If any of the above apply, complete only C.5.c, C.5.d and section E of the addendum following C.5.b. (See addendum instructions)			
	c. Identify the quality of reclaimed water to be produced relative to the planned reuse or reuses of the reclaimed water: (See addendum instructions)			
Level 1 Level 2 Level 1 and Level 2 Industrial (applicable to reclamation of industrial wastewater) Unknown (applicable to unlisted reuses) d. List any other physical, chemical, and biological characteristics and constituent concentrate affect the intended reuse of the reclaimed water with respect to adverse impacts to publishe environment. (See addendum instructions)				
			e. Indicate the designated design capacity of the reclamation system or satellite reclamatic (See addendum instructions)	
	For each proposed reuse of reclaimed water (reclaimed from municipal or industrial wastewater) that is listed in 9VAC25-740-90 A of the Water Reclamation and Reuse Regulation or for each reuse of laimed industrial wastewater that is listed in 9VAC25-740-90 A, provide the following information. a. Describe the proposed reuse.			

). 	Describe any known risks of the proposed reuse to public health.	
c. wa	Describe the degree of public access and human exposure, including worker contact ter that is or will be caused by the proposed reuse.	, to reclaimed
	Indicate the reclaimed water treatment necessary to prevent nuisance conditions by use.	the proposed
	Describe the potential for improper or unintended use of reclaimed water result oposed reuse. (See addendum instructions)	ting from the
	For new indirect potable reuse proposals, provide the following information:	
	(1) Name of the surface water to receive the reclamation system discharge and from will be withdrawn for potable water supply: (See addendum instructions)	n which water
	(2) Receiving water body type: Lake or pond River or stream	
	(3) Name of water treatment facility that will withdraw water for potable water supply	y:
	(4) Attach a map that shows the location of both the discharge from the reclamation intake of the water treatment facility.	system and the
	(5) Approximate the shortest distance by way of the surface water named in C. between the discharge of the reclamation system and the intake of the water treat(feet)	
	(6) Approximate the residence or transport time between the discharge of the reclarand the intake of the water treatment facility:	mation system
	(7) Approximate the mixing ratio of reclaimed water to ambient water at the intak treatment facility:	e of the water
aiı	med water management (RWM) plan	

D. Rec

- 1. For a reclamation system, satellite reclamation system or reclaimed water distribution system that provides or will provide reclaimed water directly to an end user or end users, including an end user that is also the applicant or permittee, submit a Reclaimed Water Management (RWM) plan to contain the following information. (See addendum instructions)
 - a. A description and map of the expected service area to be covered by the RWM plan for the term of the permit for the project.

- b. A current inventory of impoundments, ponds or tanks within the service area under D.1.a of the addendum, used for:
 - (1) System storage of reclaimed water and, as applicable, reject water storage that are under the control of the applicant or permittee; and
 - (2) Non-system storage of reclaimed water.
- c. A water balance that accounts for the volumes of reclaimed water to be generated, stored, reused and discharged.
- d. An example of service agreements or contracts to be established by the applicant or permittee with end users regarding implementation of and compliance with the RWM plan.
- e. A description of monitoring of end users by the applicant or permittee to verify compliance with the terms of their agreements or contracts. Monitoring must include, at a minimum, metering the volume of reclaimed water consumed by end users.
- f. An education and notification program.
- g. A cross-connection and backflow prevention program.
- h. A description of how the quality of reclaimed water in the reclaimed water distribution system will be maintained to meet standards for the intended reuse(s) of that reclaimed water.
- 2. Supplemental irrigation rates, nutrient management plans (NMPs) and site plans for irrigation reuse of reclaimed water.

ses of reclaimed water as follows? (See addendum instructions)
 ☐ Bulk irrigation reuse. ☐ Non-bulk irrigation reuse. ☐ There will be no irrigation reuses. (Proceed to E.)
Will all irrigation with reclaimed water within the service area of the RWM plan be supplemental gation? (See addendum instructions)
 ☐ Yes. Explain how supplemental irrigation rates will be achieved for bulk and non-bulk irrigation reuse of reclaimed water. ☐ No. (Proceed to E.)
Indicate the concentration of total nitrogen (N) and total phosphorus (P) present or expected to be sent in the reclaimed water for irrigation reuse:
\square Annual average concentration of total N and total P greater than 8.0 mg/l and 1.0 mg/l, respectively (> Biological Nutrient Removal or BNR);
or
\square Annual average concentration of total N and total P less than or equal to 80 mg/l and 1.0 mg/l, respectively (\le BNR).
For each irrigation property listed under B.3.d of this addendum that is a <u>bulk irrigation</u> reuse site, mit the following with the RWM plan: (See addendum instructions)

- (1) A nutrient management plan if:
 - (a) The reclaimed water applied to the irrigation reuse site is > BNR (see D.2.c above), or
 - (b) Independent of the reclaimed water nutrient content and in addition to irrigation reuse (i) there is no option to dispose of the reclaimed water through a VPDES permitted discharge, or (ii) there is an option to dispose of the reclaimed water through a VPDES permitted discharge, but the VPDES permit does not allow discharge of the full nutrient load under design flow. With the nutrient

	management plan, provide a copy of the letter from Division of Soil and Water Conservation approving	
	(2) A site plan.	
ai re	e. For all <u>non-bulk irrigation</u> reuse of reclaimed water that area specified in D.1.a, including each irrigation property reuse site, describe measures that are or will be implement irrigation reuse. Attach additional information as needed. (S	listed under B.3.d that is a non-bulk irrigation ed to manage nutrient loads from the non-bulk
E. C	Certification Statement (See addendum instructions)	
the in person know	rtify under penalty of law that this document and all atta ervision in accordance with a system designed to assure that information submitted. Based on my inquiry of the person ons directly responsible for gathering the information, the wledge and belief, true, accurate, and complete. I am mitting false information, including the possibility of fine and	qualified personnel properly gather and evaluate n or persons who manage the system, or those e information submitted is, to the best of my aware that there are significant penalties for
Signa	ature:	Date:
Signa	nature:	Date:
Name	ne of person(s) signing above (printed or typed):	
Title(e(s) of person(s) signing above:	

WATER RECLAMATION AND REUSE ADDENDUM TO AN APPLICATION FOR A VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT OR A VIRGINIA POLLUTION ABATEMENT PERMIT

ADDENDUM INSTRUCTIONS

WHO MUST COMPLETE THE ADDENDUM

Owners or operators of **existing permitted** reclamation systems, satellite reclamation systems, reclaimed water distribution systems, and end users¹ must complete this addendum with the application to reissue a VPDES or VPA permit or independent of the permit application and for **only expansion or modification**² **of the existing permitted facilities**.

Owners or operators of **new or existing unpermitted** reclamation systems, satellite reclamation systems, reclaimed water distribution systems or end users¹ must complete this addendum to submit with an application for either a Virginia Pollutant Discharge Elimination System (VPDES) permit or Virginia Pollution Abatement (VPA) permit.

WHERE TO FILE THE ADDENDUM

The completed addendum must be submitted to the DEQ regional office covering the area where the project is or will be located. DEQ regional office information can be found on the DEQ internet website at http://www.deq.virginia.gov/regions/homepage.html or can be obtained by calling the DEQ Central Office in Richmond, Virginia at (804) 698-4000.

INSTRUCTIONS TO COMPLETE THE ADDENDUM

This addendum is to be submitted as part of a VPDES or VPA permit application or permit modification for water reclamation and reuse projects. Complete all items unless indicated otherwise, or enter "NA" for "not applicable". Requested information should be entered on the lines or spaces and in the boxes provided in the addendum, or as attachments to the addendum if needed.

Instructions are only provided for specific items contained in the addendum. Applicants will be referred to the instructions to complete these items by the notation "(See addendum instructions)".

Definitions for terms used in the addendum are available in 9VAC25-740-10 of the Water Reclamation and Reuse Regulation.

Note: Information required for Sections A, B, C and D of the addendum may be provided, in part, by referencing specific information previously submitted to the DEQ unless changes have occurred that require the submission of new or more current information.

^{1.} Refers specifically to an end user or end users that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

^{2.} For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation system or reclaimed water distribution system) or end user^{1.} is any change to the facilities or reuses of that system or end user^{1.}, respectively, warranting the inclusion of new reclaimed water standards, monitoring requirements or conditions in the permit currently issued to the existing system or end user^{1.}

B. Permitting Information

- **B.1.a., B.2.c and B.3** For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation system or reclaimed water distribution system) or end user^{1.} is any change to the facilities or reuses of that system or end user^{1.}, warranting the inclusion of new reclaimed water standards, monitoring requirements or conditions in the permit currently issued to the existing system or end user^{1.}
- **B.3.b.** An end user^{1.} may be authorized under the permit issued to one of the reclamation systems, satellite reclamation systems, or reclaimed water distribution systems that supply reclaimed water to the end user provided the end user is under common ownership or management with the permitted system.
- **B.3.d.** In the table under the column heading "Location of Irrigation Property", briefly describe the location of the irrigation property to receive reclaimed water that is under common ownership or management with the wastewater treatment works or system identified in the first column of the table on the same row. Also, identify the location of the irrigation property on a map to attach to the addendum or on the service area map in the Reclaimed Water Management plan described in D.1.a of the addendum.
- **B.4.b** If an end user^{1.} fails to comply with the terms and conditions of a service agreement or contract between the end user^{1.} and more than one reclamation system, satellite reclamation system and/or reclaimed water distribution system from which the end user^{1.} receives reclaimed water, complete D.1.a, D.1.b and D.1.c; D.2 if the reuse of the end user^{1.} includes irrigation, and E of the addendum.
- **B.4.d** Where an end user^{1.} will blend the reclaimed water that it receives from more than one reclamation system, satellite reclamation system and/or reclaimed water distribution system for subsequent distribution to other end users not under common ownership or management with the end user^{1.}, the end user^{1.} is considered a reclaimed water agent and is required to complete information pertaining to reclaimed water distributions systems and providers of reclaimed water in sections C and D of the addendum.

C. General Project Information

C.1 For each reclamation system, satellite reclamation system, and reclaimed water distribution system, provide a design description and site plan showing operations and unit processes of the system, including and as applicable, treatment, storage, distribution, reuse and disposal facilities, and reliability features and controls. Wastewater treatment works, reclamation systems and reclaimed water distribution systems previously permitted need not be included unless they are directly tied into the new units or are critical to the understanding of the complete project.

For a reclamation system that receives source water from more than one wastewater treatment works, list all the unit treatment processes of only the reclamation system. For a satellite reclamation system or where a wastewater treatment works and a reclamation system are or will be one in the same facility and will be covered by a single VPDES or VPA permit, list all the unit treatment processes for the satellite reclamation system or combined wastewater treatment works and reclamation system.

- **C.2** For each reclamation system, satellite reclamation system, and reclaimed water distribution system, provide a general location map that shows the orientation of the system with reference to at least two geographic features (e.g., numbered roads, named streams or rivers, etc.). A general location map for a reclaimed water distribution system may be included in the map of the service area to be submitted in the Reclaimed Water Management (RWM) plan per D.1.a of the addendum instructions.
- **C.3.c** For all those wastewater treatment works listed in C.3.a of the addendum with one or more significant industrial users (SIUs) indirectly discharging to the treatment works, list the name of the wastewater treatment works, the names of all SIUs indirectly discharging to that wastewater treatment works, and indicate if the wastewater treatment works has an approved pretreatment program to manage pollutants of concern discharged by SIUs. Some of this information may be obtained from VPDES or VPA permit files or, if applicable, the

Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

pretreatment program files of some VPDES permitted facilities. For **only** a VPDES permitted publicly owned treatment works (POTW) with SIUs, this information is available on Form 2A, Part F of the VPDES permit application and in the pretreatment program file if the facility is also required to have a pretreatment program. For VPA permitted wastewater treatment works with SIUs, this information may be available under Form C, Part C-I or Form D, Part D-I of the VPA permit application. If permit or pretreatment program files are referenced, please verify that they actually contain the requested information before doing so. Additional references should be used to provide complete, current and accurate information.

Only VPDES permitted POTWs with SIUs may be required to have a pretreatment program and not all pretreatment programs are or will be approved. Information regarding the approval status of a pretreatment program for a particular facility can be obtained from the DEQ Regional Office where the project is or will be located.

C.3.d Provide analyses of the effluent or source water to be diverted by each wastewater treatment works to the reclamation system. Provide effluent analyses and data submitted with the application for either a VPDES permit in accordance with 9VAC25-31-100 or for a VPA permit application in accordance with 9VAC25-32-60 and VPA Permit Application Form C, Part C-I or Form D, Part D-IV, for each wastewater treatment works as applicable.

C.4.c For each SIU that discharges directly or indirectly to the sewage collection pipeline from which sewage or municipal wastewater is or will be diverted to the satellite reclamation system, excluding any downstream SIUs whose discharge has no potential to backflow to the satellite reclamation system intake, provide the name of the SIU, the location in terms of latitude and longitude of the SIU, and distance between the SIU and the satellite reclamation system along the sewage collection system line or lines.

Some of this information may be obtained from the VPDES or VPA permit files or, if applicable, the pretreatment program files of a VPDES permitted treatment works at the end of the sewage collection system that receives or will receive all remaining sewage. For **only** a VPDES permitted POTW with SIUs, some information is available on Form 2A, Part F of the VPDES permit application and in the pretreatment program file if the facility is also required to have a pretreatment program. For VPA permitted wastewater treatment works with SIUs, this information may be available under Form C, Part C-I or Form D, Part D-I of the VPA permit application. If permit or pretreatment program files of the treatment works at the end of the sewage collection system are referenced, please verify that they actually contain the requested information before doing so. Additional references should be used to provide complete, current and accurate information regarding the SIUs, particularly for the location (latitude and longitude) and distance between each SIU and the satellite reclamation system.

C.4.d For all satellite reclamation systems, provide, at a minimum, the concentration of BOD_5 and Total Suspended Solids (TSS) in the municipal wastewater or sewage that is received by the satellite reclamation system from the sewage collection system. The BOD_5 and TSS concentrations should be based on either actual analyses or expected concentrations from a wastewater treatment design reference deemed acceptable by the DEQ, and should be representative of the municipal wastewater or sewage at the point of diversion from the sewage collection system to the satellite reclamation system. If other data regarding the characteristics of the municipal wastewater or sewage are available, this information may also be submitted.

For a satellite reclamation system with SIUs that discharge directly or indirectly to the sewage collection pipeline from which sewage or municipal wastewater is or will be diverted to the satellite reclamation system, excluding any downstream SIUs whose discharge has no potential to backflow to the satellite reclamation system intake, analyses of the sewage or municipal wastewater received by the satellite reclamation system from the sewage collection system may be required. The analyses for parameters in addition to BOD₅ and TSS will be based on pollutants of concern discharged by the SIUs.

C.5.a Check all the boxes that apply to the reclamation system to be permitted. If the first box is checked for reuse of reclaimed industrial wastewater on exclusively the property of the industrial facility where the reclaimed water is produced, continue to C.5.b. For a reclamation system that reclaims or will reclaim industrial wastewater combined with sewage or municipal wastewater, and the industrial wastewater will compose less than or equal to 90 % of the mixture, check the 3rd box. For a reclamation system that reclaims or will reclaim

industrial wastewater combined with sewage or municipal wastewater, and the industrial wastewater will compose greater than 90 % of the mixture, check the 4th box. Other categories with boxes are self-explanatory.

C.5.b Check all boxes that apply to the reuse of reclaimed industrial water on exclusively the property of the industrial facility where the reclaimed water is produced. If none of the boxes are checked, complete the remainder of the addendum. If one or more of the boxes are checked, complete only C.5.c, C.5.d and section E of the addendum following C.5.b. The DEQ Regional Office may arrange to inspect the reclamation system and reuse of reclaimed industrial water at the industrial facility to determine if it may be excluded from the requirements of the Water Reclamation and Reuse Regulation (9VAC25-740).

C.5.c Indicate the quality of reclaimed water to be produced relative to the planned reuse or reuses of the reclaimed water. Following the instructions below, check only one box that is most applicable to the reclamation system or satellite reclamation system to be permitted.

Reclamation systems and satellite reclamation systems that reclaim municipal wastewater

Step 1. For an existing or proposed reclamation system that reclaims or will reclaim municipal wastewater or a satellite reclamation system that reclaims or will reclaim sewage, refer to 9VAC25-740-70 A of the Water Reclamation and Reuse Regulation to determine which standards the system meets or will be capable of meeting. If the system is not capable of meeting standards for Level 2 reclaimed water at a minimum, the water produced by the system is not reclaimed for the purpose of reuse as defined in the Water Reclamation and Reuse Regulation.

Step 2. The reclaimed water standards to be included in the permit for the reclamation systems or satellite reclamation system will be determined by: (a) the treatment capabilities of the proposed or existing system, and (b) the proposed or existing reuses of reclaimed water produced by the system. Refer to 9VAC25-740-90 A of the Water Reclamation and Reuse Regulation to identify existing or planned reuses of reclaimed water from the reclamation system or satellite reclamation system and the minimum standard requirements, either Level 1 or Level 2, required for those reuses. If all reuses require Level 1 or a combination of Level 1 and Level 2, the reclamation system or satellite reclamation system must be capable of producing a minimum of Level 1 reclamation system or satellite reclamation system must be capable of producing a minimum of Level 2 reclaimed water.

For any proposed or existing reuses **not** specifically listed in 9VAC25-740-90 A, it may be necessary to develop minimum standard requirements for reclaimed water on a case-by-case basis. In this situation, check the box in C.5.b. for "Unknown (applicable to unlisted reuses)" and complete C.6. of the addendum.

Step 3. Confirm that the treatment capabilities of the proposed or existing reclamation system or satellite reclamation system (Step 1) correspond with the appropriate minimum standard requirement (Level 1 or Level 2) for the proposed or existing reuses of reclaimed water from that system (Step 2). Where they correspond, check the box in C.5.b. for either "Level 1" or "Level 2", as applicable. In some cases, an existing or proposed reclamation system or satellite reclamation system has or will have the option to produce both Level 1 and Level 2 reclaimed water with separate storage and delivery to separate distribution systems for each of Level 1 and Level 2 reclaimed water. In this case, check the box in C.5.b. for the combination of "Level 1 and Level 2".

Where the treatment capabilities of the proposed or existing reclamation system or satellite reclamation system (Step 1) do not correspond with the appropriate minimum standard requirement (Level 1 or Level 2) for the proposed or existing reuses of reclaimed water from that system (Step 2), (i.e., the reuses require a minimum of Level 1 reclaimed water but the reclamation system or satellite reclamation system is only capable of producing Level 2 reclaimed water), the reuses must be limited to those that can accept Level 2 reclaimed water or the treatment capabilities of the system must be upgraded to produce Level 1 reclaimed water. If the reuses will be limited to correspond to the treatment capabilities of the reclamation system or satellite reclamation system, check the box in C.5.b. of the standard (Level 1 or Level 2) identified in Step 1 that can be met by the system. If the reclamation system or satellite reclamation system will be modified or upgraded to meet the minimum standard requirement of the reuse(s) identified in Step 2, check the box in C.5.b. that corresponds with the minimum standard requirement (Level 1 or Level 2) for the reuse(s).

Reclamation systems that reclaim industrial wastewater

There are no specific standards for the reclamation of industrial wastewater. These are to be established on a case-by-case for each proposal to reclaim industrial wastewater. If the project involves the reclamation of industrial wastewater, including industrial wastewater containing less than 10 % sewage or municipal wastewater, check "Industrial (applicable to reclamation of industrial wastewater)".

If the project involves the reclamation of industrial wastewater, which will not be distributed for reuses off the industrial site, the project <u>may</u> be excluded from the requirements of the Water Reclamation and Reuse Regulation (9VAC25-740-50 A). Please contact the DEQ Regional Office that covers the project location to determine whether or not a permit may be required.

C.5.d The Water Reclamation and Reuse Regulation allows for the reclamation of industrial water in addition to municipal wastewater or sewage. Due to the variable composition of industrial wastewater compared to municipal wastewater or sewage, and the absence of analogous pretreatment program requirements for reclamation systems of industrial wastewater in the regulation, the applicant or permittee must provide other physical, chemical, and biological characteristics and constituent concentrations that may affect the intended reuse of the reclaimed water with respect to adverse impacts to public health or the environment.

The applicant or permitte must also provide this information for the reclamation of municipal wastewater or sewage to produce Level 2 reclaimed water where the wastewater treatment works providing effluent or source water to the reclamation system has significant industrial users but is not required to have a pretreatment program or the equivalent to a pretreatment program in accordance with 9VAC25-740-150 A.

C.5.e The designated design capacity of a reclamation system or satellite reclamation system will be the design flow or some percentage of the design flow for a wastewater treatment facility (WWTF) that provides source water or effluent to the reclamation system or satellite reclamation system. The permitted design flow of a WWTF is based on the design capacity of the facility, which is determined as the average rate of influent flow per 24 hours that can be reliably treated by that facility based on projected flow estimates to be received at full buildout. The WWTF must be designed to process this influent flow 365 days a year with appropriate peak factors provided to meet reliability and redundancy requirements.

When all the effluent of a WWTF will be discharged to a reclaimed water distribution system, a non-system storage facility or directly to a reuse (water reclamation and reuse) with little or no additional separate treatment, the designated design capacity of the reclamation system shall be the design flow of the WWTF. This applies to satellite reclamation systems and some reclamations systems that will not have the option to discharge to surface waters.

When a WWTF will have an effluent discharge to surface waters and will divert a portion of the treated effluent that it produces with little or no additional treatment to reclamation and reuse, the designated design capacity of the reclamation system shall be the maximum amount of treated effluent the WWTF shall divert to reclamation and reuse at any one time. For example, if the permitted design flow of a WWTF is 1.0 MGD and a maximum of 50% of its design flow may be diverted to reclamation and reuse at any one time, the designated design capacity of the reclamation system shall be 0.5 MGD.

When additional separate treatment must be provided to the effluent of the WWTF in order to produce reclaimed water suitable for specific end uses, the designated design capacity of the reclamation system will be the design capacity of only those additional, separate treatment components used to produce the higher quality reclaimed water. For example, the permitted design flow of a WWTF capable of producing Level 2 reclaimed water is 2.0 MGD. However, the same facility will divert a maximum of 5% (or 0.1 MGD) of its design flow to filtration and higher level disinfection to produce Level 1 reclaimed water. The designated design capacity of the Level 1 reclamation system shall be 0.1 MGD. In this same example, the designated design capacity of the Level 2 reclamation system shall be 2.0 MGD for a non-discharging WWTF or some percentage of 2.0 MGD if the permittee also has an effluent discharge to surface waters.

C.6.e For each proposed reuse of reclaimed water (reclaimed from municipal or industrial wastewater) that is *not listed* in 9VAC25-740-90 A of the Water Reclamation and Reuse Regulation or for each reuse of reclaimed *industrial* wastewater that is *listed* in 9VAC25-740-90 A, provide a general narrative statement that describes features of the water reclamation and reuse project or steps to be taken by the applicant or permittee to prevent improper or unintended use of reclaimed water resulting from the proposed reuse. Based on this statement, also indicate the potential for such improper or unintended use.

C.6.f For new indirect potable reuse projects that are proposed after October 1, 2008, provide the information requested for items C.6.f (1) through C.6.f (7). Associated with each indirect potable reuse project, there will be a potable water withdrawal by a water treatment plant located on the surface water to which the reclamation system will discharge. Enter the name of the water treatment plant for item C.6.f (3). The location information requested for item C.6.f (4), should be submitted on a USGS topographic map, preferably 7.5 minute series where available.

D. Reclaimed water management (RWM) plan.

D.1. A Reclaimed Water Management (RWM) plan is required for a reclamation system, satellite reclamation system or reclaimed water distribution system that <u>provides</u> reclaimed water directly to an end user or end users, including an end user that is also the applicant or permittee. Submit one RWM plan for each reclamation system, satellite reclamation system, reclaimed water distribution system or combination thereof, to be authorized by a separate permit.

Where the applicant or permittee is the provider of reclaimed water and the exclusive end user of that reclaimed water, or an end user¹ that fails to comply with the terms and conditions of a service agreement or contract between the end user¹ and more than one provider from which it receives reclaimed water, submit information for only D.1.a, D.1.b and D.1.c.

D.1.a. The description and map of the area served reclaimed water by the provider (service area) must include existing and anticipated expansion of the service area that is likely to occur within the term of the permit to be issued (i.e., five years for a VPDES or ten years for a VPA permit). The map must identify all reuses according to reuse categories specified in 9VAC25-740-90 A of the Water Reclamation and Reuse Regulation (or other categories that may be developed for reuses that are identified and described in C.6 of the addendum) and their locations within the service area. The map must also identify and show the location of all public potable water supply wells and springs, and public water supply intakes, within the boundaries of the service area. If this addendum is to reissue a permit for existing systems that have been expanded or modified² since the issuance or last reissuance of the permit, provide an updated description and map of the service area identifying any changes to the service area, if applicable.

Where the applicant or permittee is the provider of reclaimed water and a non-exclusive end user of that reclaimed water, the description and map of the service area must include property under common ownership or management with the applicant or permittee if the property is to receive reclaimed water for reuse from the applicant or permittee.

D.1.b. Submit a current inventory of reject water storage, system storage and non-system storage facilities located within the service area of the RWM plan. For a previously permitted reclamation system, satellite reclamation system or reclaimed water distribution system with an existing inventory, include any amendments to the inventory that have been made since the permit issuance or last permit reissuance for the system. The inventory must include the following:

Refers specifically to an end user that receives reclaimed water from more than one reclamation system, satellite reclamation system, reclaimed water distribution system, or a combination thereof.

^{2.} For the purposes of this addendum, modification to an existing system (i.e., reclamation system, satellite reclamation system or reclaimed water distribution system) or end user^{1.} is any change to the facilities or reuses of that system or end user^{1.}, respectively, warranting the inclusion of new reclaimed water standards, monitoring requirements or conditions in the permit currently issued to the existing system or end user^{1.}

- 1. Name or identifier for each storage facility,
- 2. Location of each storage facility (including latitude and longitude),
- 3. Function of each storage facility (i.e., reject water storage, system storage or non-system storage),
- 4. Type of each storage facility (i.e., covered tank, uncovered tank, lined pond, unlined pond, etc.), and
- 5. Location (latitude and longitude) and distance of the nearest potable water supply well and spring, and public water supply intake, to each storage facility within 450 feet of that facility.
- **D.1.c.** Submit a water balance that accounts for the volumes of reclaimed water to be:
 - 1. Generated by the reclamation system or satellite reclamation system. This is assumed to be the design flow of the system.
 - 2. Stored in reject water storage, system storage and non-system storage facilities. All storage facilities, including landscape impoundments used for non-system storage, can not discharge to surface waters of the state except in the event of a storm greater than the 25-year 24-hour storm.
 - 3. Reused by reuse categories specified in D.1.a. of the addendum. The water balance must include seasonal and annual reclaimed water demand for each reuse category based on projected volumes for new projects or actual volumes for existing projects.
 - 4. Discharged through a VPDES permitted outfall for reclamation systems, back to a sewage collection system for satellite reclamation systems, or otherwise disposed (e.g., via a land treatment system).
- **D.1.d.** Submit examples of a service agreements or contracts to be established between the provider of the reclaimed water and end users. More than one example service agreement or contract may be developed by a provider of reclaimed water for different end users or reuse categories. Each example service agreement or contract must contain, at a minimum, the following:
 - 1. Prohibitions and requirements specified in 9VAC25-740-50 B and 9VAC25-740-170 that apply to the particular planned reuse of each end user.
 - 2. A requirement for property owners to report all potable and non-potable water supply wells on their property to the provider of the reclaimed water and to comply with appropriate setback distances for wells where reclaimed water will be used on the same property.
 - 3. A statement that the provider of reclaimed water shall also reserve the right to terminate the agreement and withdraw service for any failure by the end user to comply with the terms and conditions of the agreement or contract if corrective action for such failure is not taken by the end user.
 - 4. Language explaining the proper use of reclaimed water by the end user for the purpose of managing nutrients from <u>non-bulk irrigation reuse</u> of reclaimed water that is > BNR (i.e., has an annual average concentration of total N and total P greater than 8.0 mg/l and 1.0 mg/l, respectively) within the service area specified in D.1.a of the addendum.
 - 5. A requirement for the end user to submit the following for each <u>bulk irrigation reuse</u> site that is <u>not</u> under common ownership or management with the wastewater treatment works, reclamation system, satellite reclamation system or reclaimed water distribution system from which it receives reclaimed water:
 - (a) A nutrient management plan (NMP) for each irrigation reuse site that receives or will receive reclaimed water that is > BNR (i.e., has an annual average concentration of total N and total P greater than 80 mg/l and 1.0 mg/l, respectively). The NMP must be prepared by a nutrient management planner certified by the Department of Conservation and Recreation (DCR) and must be current in accordance with the Nutrient Management Training and Certification Regulations, 4 VAC 5-15-10 et seq.
 - (b) A site plan as described under D.2.d (2) of the addendum instructions.

- **D.1.e.** Describe how end users will be monitored via metering of reclaimed water consumed and other means to verify compliance with the terms of their service agreements or contracts with the provider of reclaimed water. Other means of monitoring may include periodic, random inspection of end user facilities and records related to reclaimed water reuse.
- **D.1.f.** Submit an education and notification (E&N) program only if reuses of reclaimed water within the service area will:
 - Require Level 1 reclaimed water,
 - Be in areas accessible to the public, or
 - Are likely to have human contact.

The E&N program has separate components for education and notification. For the <u>education</u> component, the E&N program must contain, at a minimum, the following:

- 1. Information to be provided to end users and the public likely to have contact with reclaimed water, regarding the origin, nature, and characteristics of the reclaimed water; the manner in which the reclaimed water can be used safely; and uses for which the reclaimed water is prohibited or limited.
- 2. A description of all modes of communication to be used for education and distribution of information, including, but not limited to, meetings, distribution of written information, the news media (i.e., news papers, radio, television or the internet), and advisory signs as described in 9VAC25-740-160.
- 3. A description and schedule of educational activities for individual end users. End users must receive program education at the time of their initial connection to the reclaimed water distribution system. For non-bulk irrigation end users of reclaimed water > BNR (i.e., reclaimed water having an annual average concentration of total N and total P greater than 80 mg/l and 1.0 mg/l, respectively), program education must be provided at least annually.

The <u>notification</u> component of the E&N program must contain procedures to notify end users and the affected public of treatment failures at the reclamation system that:

- 1. Can adversely impact human health, or
- 2. Result in loss of reclaimed water service.

At a minimum, notification procedures described in 9VAC25-740-170 A 2 must be included in the E&N program.

- **D.1.g.** Submit a cross-connection and backflow prevention program that:
 - 1. Evaluates the potential for cross-connections of the reclaimed water distribution system to a potable water system and backflow to the reclaimed water distribution system from industrial end users,
 - 2. Evaluates the public health risks associated with possible backflow from industrial end users,
 - 3. Describes inspections to be performed by the owner or management of the reclaimed water distribution system at the time end users connect to the system and periodically thereafter to prevent cross-connections to a potable water system and backflow from industrial end users as determined necessary through the program evaluation, and
 - 4. Insures that cross-connection and backflow prevention design criteria specified in 9VAC25-740-110 B for reclaimed water distribution systems are implemented.

Note: A backflow prevention device is required on the reclaimed water service connection to an industrial end user, unless evaluation by the cross-connection and backflow prevention program determines that there is minimal risk to public health associated with possible backflow from the industrial end user or that there will be no backflow from the industrial end user capable of contaminating the reclaimed water supply.

D.1.h. Describe how reclaimed water quality will be maintained in the reclaimed water distribution system to meet the standards for the intended reuse(s) of the reclaimed water in accordance with 9VAC25-740-90. The

detail of the description will vary according to the size of the reclaimed water distribution system, volume and type (e.g., covered α uncovered) of system storage within the distribution system, and minimum standards required for all end uses of reclaimed water delivered by the distribution system. Distribution systems should consider, at a minimum, accurate flow recording throughout the system and the ability to monitor disinfection residual (i.e., chlorine or other) to prevent bacteria regrowth and increased turbidity.

- **D.2.a.** Check all boxes that apply. Per the Water Reclamation and Reuse Regulation, bulk irrigation reuse is defined as reuse of reclaimed water for irrigation of an area greater than five acres on one contiguous property and non-bulk irrigation reuse is defined as reuse of reclaimed water for irrigation of individual areas less than or equal to five acres. If irrigation is not identified as a reuse of reclaimed water within the service area of the RWM plan (see addendum instructions for D.1.a), proceed to E. of the addendum.
- **D.2.b.** Supplemental irrigation is defined in the Water Reclamation and Reuse Regulation (9VAC25-740) as irrigation, which in combination with rainfall, meets but does not exceed the water necessary to maximize production or optimize growth of the irrigated vegetation. If irrigation (bulk or non-bulk) with reclaimed water within the service area of the RWM plan shall be supplemental, check "Yes" and provide the following:
 - 1. For non-bulk irrigation reuse, a description of educational materials and instructions for non-bulk irrigation end users explaining how supplemental irrigation is to be achieved, and a description of how this information will be distributed; and
 - 2. For bulk irrigation reuse by the applicant and end users other than the applicant, the methodology(s) that will be used to calculate supplemental irrigation. By definition, supplemental irrigation allows the application of water up to but not in excess of the amount necessary to "maximize production or optimize growth of the irrigated vegetation". Where it is demonstrated that irrigation with reclaimed water has or will adversely impact the productivity or growth of the irrigated vegetation related to the salt content of the reclaimed water, the definition allows the application of additional water, as necessary, to leach salts beyond the root zone of the irrigated vegetation. Therefore, a volume of reclaimed water less than or equal to ten percent of the water lost by evapotranspiration from the irrigated vegetation may be used for leaching and shall be included in the calculation of supplemental irrigation. Any additional volume of water required for leaching to maximize production or optimize growth of the irrigated vegetation shall be provided from sources other than reclaimed water (e.g., rainwater, potable water, etc.) and shall also be included in the calculation of supplemental irrigation.

Irrigation with reclaimed water at rates greater than supplemental irrigation shall not be permitted as irrigation reuse, but may be permitted as land treatment in accordance with the design criteria of the Sewage Collection and Treatment Regulations, 9VAC25-790. If irrigation with reclaimed water within the service area of the RWM plan will not be supplemental irrigation, check "No" and proceed to E. of the addendum.

- **D.2.d.** Where the treatment works or system to be permitted and the property to which the system distributes or will distribute reclaimed water for <u>bulk irrigation reuse</u> are identified in B.3.d of the addendum, submit the following with the RWM plan required per D.1 of the addendum:
 - (1) A nutrient management plan (NMP) for each of the bulk irrigation reuse site if:
 - (a) The reclaimed water applied to the irrigation reuse site is > BNR (i.e., has an annual average concentration of total N and total P greater than 8.0 mg/l and 1.0 mg/l, respectively). The NMP must be prepared by a nutrient management planner certified by the Department of Conservation and Recreation, Division of Soil and Water Conservation (DCR) and must be current in accordance with the Nutrient Management Training and Certification Regulations, 4 VAC 5-15; or
 - (b) Independent of the reclaimed water nutrient content and in addition to irrigation reuse (i) there is no option to dispose of the reclaimed water through a VPDES permitted discharge, or (ii) there is an option to dispose of the reclaimed water through a VPDES permitted discharge, but the VPDES permit does not allow discharge of the full nutrient load under design flow. The latter situation would typically, but not exclusively, apply to a treatment works with a VPDES permitted discharge, implementing water reclamation and reuse in lieu of providing treatment to meet nutrient effluent limits at design flow. The NMP must be prepared as specified in D.2.d(1)(a) of the addendum instructions and must, under these

circumstances, be <u>approved by the DCR</u>. With the NMP, provide a copy of the letter from DCR approving the NMP.

- (2) A site plan displayed on the most current USGS topographic maps (7.5 minutes series, where available) and showing the following:
 - (a) The boundaries of the irrigation site;
 - (b) The location of the following within 250 feet of the irrigation site:
 - all potable and non-potable water supply wells and springs, public water supply intakes
 - occupied dwellings
 - property lines
 - areas accessible to the public
 - outdoor eating, drinking and bathing facilities
 - Surface waters, including wetlands
 - Limestone rock outcrops and sinkholes
 - (c) Setbacks areas around the irrigation site in accordance with 9VAC25-740-170.

Where expansion of an existing irrigation site is anticipated, provide the same information in the site plan for the area of proposed expansion.

D.2.e. For non-bulk irrigation reuse of reclaimed water that is > BNR (i.e., has an annual average concentration of total N and total P greater than 8.0 mg/l and 1.0 mg/l, respectively), a NMP will not be required. However, the RWM plan must describe other measures to be implemented by the applicant or permittee to manage nutrient loads by non-bulk irrigation reuse of reclaimed water that is > BNR within the service area specified in D.1.a. The service area includes irrigation property under common ownership or management with the applicant or permittee listed under B.3.d of the addendum that is used for non-bulk irrigation reuse.

Other measures to manage nutrient loads by non-bulk irrigation reuse of reclaimed water that is > BNR must include, but are not limited to the following:

- (1) Reclaimed water metering of individual non-bulk irrigation end users, which may be addressed by information submitted for D.1.e of the addendum;
- (2) Routine distribution of literature not less than annually, to individual non-bulk irrigation end users addressing the proper use of reclaimed water for irrigation in accordance with 9VAC25-740-170 A (applicable only to reuses that require Level 1 reclaimed water, will be in areas accessible to the public, or are likely to have human contact); and
- (3) Monthly monitoring of nitrogen (N) and phosphorus (P) loads by non-bulk irrigation reuses to the service area of the RWM plan based on the total monthly metered use of reclaimed water for the service area and the monthly average concentrations of total N and total P in the reclaimed water.

E. Certification Statement

To complete the Water Reclamation and Reuse Addendum for the application of either a Virginia Pollutant Discharge Elimination System (VPDES) permit or a Virginia Pollution Abatement (VPA) permit, section E. of the addendum must be completed by the appropriate signatory authority specified in 9VAC25-31-110 of the VPDES Permit Regulation or 9VAC25-32-70 of the VPA Permit Regulation, respectively.